

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of	)	
	)	
Digital Audio Broadcasting Systems	)	
And Their Impact on the Terrestrial	)	MM Docket No. 99-325
Radio Broadcast Service	)	

**Introduction**

1. The International Association of Audio Information Services (IAAIS) submits these comments to the Federal Communication Commission (FCC) in response to FCC 07-33, MM Docket No. 99-325 the SECOND REPORT AND ORDER, FIRST ORDER ON RECONSIDERATION AND SECOND NOTICE OF PROPOSED RULE MAKING.

2. IAAIS represents, through its member stations in the US, the information access needs of more than 10 million Americans who live with a disabling condition that prevents them from using printed material. Generally broadcast on the subcarriers of public radio and community radio stations, members of IAAIS maintain a vital link between current, print materials and the millions of people who depend on them for local, daily news and information. With the American population trending older and older as the baby boom generation reaches retirement age, IAAIS Members are serving an ever increasing audience of people with late-life visual impairments and other print-restricting disabilities.

3. IAAIS applauds the Commission for ensuring that similar treatment of radio reading services (RRSs) for blind and otherwise print-restricted persons will exist in the digital transition by “permitting digital datacasting services to operate consistent with existing broadcast policies and rules applicable to analog SCA services” (paragraph 48). By establishing an approach to digital operations consistent with the rules and operation currently in place with SCA services, IAAIS members will be better able to plan for, and execute a transition to the digital space of their host channels.

**IAAIS makes the following observations:**

4. IAAIS is pleased that the Commission recognized the importance of locally operated, privately received reading services by using our industry as the example of a subscription style service in paragraph 49. Our history as an industry

requires us to agree with the Commission that unrestricted pay services could overwhelm free over-the-air services to the detriment of the listening public. IAAIS members were faced with similar pressures in the analog SCA system in the past. This is exactly why the Commission needed to enforce protections for reading services operating on analog SCA with Section 73.593 of the Commission's rules.

5. The Commission notes in paragraph 43 that uses for SCA are multitudinous, citing reading services, utility load management, market and financial data and news, paging systems, traffic control signal switching, bilingual television audio, and other point-to-point messages. This situation has not changed with digital broadcasting.

6. However multicasting radio program feeds, data services, pay-per-listen and other subscription-style services all are jockeying for a place in the new, digital space. If there is no ruling on the use of the digital spectrum, the pressure to generate revenue with digital spectrum may still have detrimental effects on digital reading services wishing to provide more than one reading service in a digital broadcast stream. Conversely, fair rules will engender a level playing field and foster greater service to communities.

7. For example, a direct result of FCC 82-1 and Section 73.593 of the Commissions rules is that the climate between public stations and reading services has become much more cooperative and collaborative than before the rule was created. This has allowed reading services the security they needed to expand their marketing and outreach and discover and serve greater numbers of the population in need of broadcast reading services - blind, vision-impaired and other print-disabled American consumers and a burgeoning, aging population. Now, rather than resent the spectrum provided for the use of a community-based reading service, Non-commercial educational (NCE) FM stations often assist with expertise and in-kind services. Reading services help to make the community more aware of the true public service nature of the NCE, and promote the community support of these public institutions.

8. We note, however, that by declining to impose even an interim digital RRS requirement, or put into place conditions of the type we suggested (IAAIS Comments - MM Docket No. 99-325), the Commission has in effect failed to take into account the very near future of those reading services which make a transition to digital.

9. Just as multicasting has become the reason for converting to digital FM operation for licensees, reading services hoped for the ability to multicast to meet the needs of their target audience. Some RRSs propose placing newspapers and editorials on one channel with narrative readings and periodicals on another while some hope to begin Spanish language reading services.

10. Under these rules those hopes and plans are unachievable. The only codec possible for reading service use for the foreseeable future is iBiquity's HDC. In 2005, an NPR Labs study by Dr. Ellyn Sheffield "*Report on perceptual tests of coders at low-and-very low bit-rates*" prepared for NPR and IAAIS (tables 4.8.1 and 4.8.2), HDC was unable to provide any substantial improvement in audio quality unless the bit-rate was a minimum of 24 kbps.

11. There are a finite number of bytes in the IBOC system. The station hosting a reading service has 9600 kbps with which to offer a high quality digital version of its analog FM station that will blend to analog plus a good quality second channel on which it may program other community services. It is only in the extended hybrid mode that IAAIS asked for a space to be declared to be used for reading services. With the existing technology, a 24 kbps stream for a single channel of a reading service in the extended hybrid partition is readily achievable - so long as the host station does not choose to offer only a fraction of this bandwidth so that it may use the remainder for remunerative purposes.

12. It is highly unlikely under these rules that a reading service will be provided with 48 kbps to offer two reading service streams. There is also no security for the reading service that it will have the minimum adequate bandwidth to provide even one high-quality digital service. This means that until such time in the future that HDC can provide better audio quality at very low bit rates, or until another codec can be included in the system, reading services have no secured place in the digital broadcasting environment. At the whim of a station manager, the reading service may be forced to provide a substandard digital audio or provide none at all. This situation is diametrically opposed to the Commission's statement at paragraph 85, "Our goal is to see RRS services deployed" and at paragraph 83, "... we reiterate our recognition of the value of such services and encourage their deployment in the digital environment" among the many such similar statements offered by the Commission.

13. NPR, iBiquity, and IAAIS have taken a proactive approach to resolving the issues with other codecs being deployed in the HD radio system, however, this cooperative and collaborative effort is endangered when the Commission takes a "follow the industry" approach. By relying solely on "Voluntary Industry Efforts" (paragraph 86) the Commission walks the same path that led to the abuses requiring the creation of Section 73.593 and this time, not only for NCE/reading service agreements, but for all FM stations.

14. It is true that iBiquity Digital and National Public Radio have provided much in the way of research and development of the IBOC system that helps ensure reading services can be included in the transition to digital and IAAIS members are pleased to continue those collaborative efforts. Sadly, the Commission

has ensured that the nation's 10 million plus print-restricted consumers (American Foundation for the Blind – [afb.org](http://afb.org) & Lighthouse International – [lighthouse.org](http://lighthouse.org)) will be unable to use HD radios by refusing to acknowledge the interactive nature of the HD radio with a conditional access system.

15. No matter how hard IAAIS members work with others engaged in the appropriate use of the spectrum at each station, if the Commission does not require manufacturers to create HD units that can be used by blind, visually-impaired and otherwise print-restricted consumers, manufacturers will not step up to create these units voluntarily. Without regulation to require it, there will be no interaction with HD radio for millions of Americans with limited or no access to print and the visual displays/prompts built into modern consumer technology.

16. History has shown that the VCR, cell phones, DVD players and recorders, MP3 players and televisions are all manufactured without concern for people who live with disabling conditions. The technology does exist to change that history in the HD radio world. But the Commission's inaction takes the historical marginalization of millions of American consumers with vision-restrictions into the future.

## **Summary**

17. Treating digital reading services and their host FM stations consistently with the rules in place for analog relationships and rules is a significant and positive step for helping reading services on the radio to move into digital services. Not requiring a minimal amount of digital spectrum be allocated to reading services has the effect of encouraging wildly varying agreements from station to station and a loss of standardized practices industry wide. We believe this inaction sets the stage for abuses and over-commercialization of digital services.

18. It is neither inequitable nor unreasonable to request a small amount of spectrum in this new environment. Public and commercial license holders enjoy all the analog benefits, and in digital operations have CD quality audio, multicasting ability, plus they blend to analog to maintain range of services for digital receivers.

19. Reading services have no guaranteed spectrum to ensure an improvement in audio quality; will not enjoy a blend to analog, and by not affording them a digital "home" the Commission shows a persistent lack of understanding for the needs of the 10 million plus Americans served by these non-profit, community-based broadcast services.

20. Without any regulation, the consumer electronic manufacturers do not voluntarily include people with disabilities in their product designs. The Commission has characterized the requirements of Section 255 of the Telecommunications Act as amended to be inapplicable to the new HD radios – we believe differently. The radios – especially those being designed for subscription-style services – are interactive telecommunications devices and subject to the requirements for accessibility. Even if the Commission were proper in its characterization, the moral imperative to ensure that millions of Americans with vision impairments can use a radio to receive news, information, entertainment and access to the Emergency Alert System must be fulfilled.

Submitted for:

The International Association of Audio Information Services  
By David W. Noble, Chairman  
Taskforce on HD Radio for RRS  
2323 W 14<sup>th</sup> St  
Tempe, AZ 85281-2323